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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,104

06/08/2006

Thorsten Frank

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EXAMINER

JENNISON, BRIAN W

ART UNIT

PAPER NUMBER

3742

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/582,104		FRANK, THORSTEN	
	<b>Examiner</b>		<b>Art Unit</b>	
	BRIAN JENNISON		3742	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 33-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/8/2006</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the vehicle seat must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 33-70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 33, the phrase "heating conductors being situated on the surface between and/or neighboring the sensor printed conductors" recited at lines 4-5 renders the claim indefinite because it is unclear for what arrangement is with respect to "...between and/or.....". The phrase "and/or" should be deleted.

In claim 34, the recitation of "sensor system includes seat-occupant detection sensors or temperature sensors" recited on line 2 renders the claim indefinite for improper alternative since "seat-occupant detection sensors" and "temperature sensors" have clearly structural, operational, and functional differences. Thus, the term "or" should be replaced with "and" instead.

In claim 35, the phrase "may be" recited on line 2 should be changed to "is" for positive recitation.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 33-43, 45-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmiz et al (US 2003/0141983).**

Schmiz teaches:

**Regarding Claims 33, 39-41, 45-56:** a sensor and heating element with a sensor mat 10 with a film and conductors printed on the surface and the mat being flexible. **See Paragraphs [0010] and [0019].**

**Regarding Claims 34-37:** The pressure sensor is a seat occupancy sensor and may be used to switch the heating element on or off and is used to trigger activation of an airbag.

**Regarding Claim 38, 43:** The contacts 24 and 22 make up film switches. **See Fig 1.**

**Regarding Claim 42, 57-58:** A nonwoven laminate layer protects the sensor system. **See Paragraph [0007].**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**4. Claims 60-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmiz in view of Stanley (US 2001/0045733).**

The teachings of Schmiz have been discussed above.

Schmiz fails to teach:

**Regarding Claims 60, 64-67:** Coating, etching and removing the etch resist.

Stanley teaches:

**Regarding Claims 60 and 64-67:** creating a sensor using an etching process which includes applying an etch resist, etching away a coating and removing the etch resist coating as is done in normal substrate etching processes. **See Paragraph [0034].**

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In view of the teachings of Stanley it would have been obvious to one of ordinary skill in the art at the time of the invention to include with the teachings of Schmiz, the coating an etching process since Stanley teaches an etching process for creating a printed film conductor.

Schmiz also teaches:

**Regarding Claims 61 and 69:** Terminal lug 32 which connects to a power supply.

**Regarding Claim 62-63:** A nonwoven laminate layer protects the sensor system. **See Paragraph [0007].**

**5. Claims 44, 59 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmiz as modified by Stanley and in further view of Seto et al (US 2003/0214161).**

The teachings of Schmiz as modified by Stanley have been discussed above.

Schmiz as modified by Stanley fails to teach:

**Regarding Claims 44, 59 and 70:** The carrier plastic film being made of PI, PET or PEN.

Seto teaches:

**Regarding Claims 44, 59 and 70:** A seat heater plastic film being made of a segmental plastic piece made of polyethylene terephthalate or polyimide to the planar conductive film. **See Paragraph [0019].**

In view of the teachings of Seto et al it would have been obvious to one of ordinary skill in the art at the time of the invention to include with the teachings of Schmiz as modified by Stanley the carrier plastic film being made of PI, PET or PEN since Seto teaches a plastic film in a seat heater made of polyethylene terephthalate or polyimide to locally increase the elasticisty.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Joly et al (US 2003/0071738) teaches a seat heater with occupant sensor.

Wanami et al (US 6,831,565) teaches a seat occupation judging apparatus and seat heater.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN JENNISON whose telephone number is (571)270-5930. The examiner can normally be reached on M-Th 7:00AM-5:00PM.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRIAN JENNISON/  
Examiner, Art Unit 3742

2/22/2010  
/TU B HOANG/  
Supervisory Patent Examiner, Art Unit 3742